

Claims

2. A hinge mechanism according to Claim 9 A Limb Protector, wherein the arm is mounted rotationally on a circular boss on the plate and the plate has a stop means formed thereon restricting the movement of the arm in the desired plane.

3. A hinge mechanism according to Claim 9 A Limb Protector wherein the degree of rotation of the arm is limited by the base plate.

4. A hinge mechanism according to Claim 9 A Limb Protector, 2, or 3 wherein the angular rotation of each support member relative to the end of the arm or the base plate respectively is restricted by the passage of a stud or post along an arcuate slot centred on the pivot axis.

5. A hinge mechanism according to claim 4 wherein the post is on the base of the arm and the arcuate slot in the support member.

6. A hinge mechanism according to claim 5 and including one or more spacers inserted into the arcuate slot (s) to limit the degree of rotation by enabling a stud or post to move along a portion of the arcuate slot(s).

7. A hinge mechanism according to Claim 9 A Limb Protector wherein the first and second support members known as the support members, are made of rigid reinforced material and may include a metal reinforcement associated with the pivotal connection to the hinge mechanism.

A1 8. A limb protector or brace including a system of hinging according to any one of the preceding claims.

A2 9) A limb protector including:

a) A first and second support, the first and second supports adapted to engage a part of a limb on either side of an articulated joint; and

b) A hinge mechanism comprising:

i) A base plate having a recessed portion bounded by radial walls and

ii) An arm having a first and second end, the first end of the arm located in the recessed portion, wherein the first pivotally connects to the base plate about an axis substantially perpendicular thereto in the recessed portion and a means for pivotally connecting the second end of the arm to the second support about an axis substantially perpendicular to the base plate and further wherein the second support has an arcuate slot and the arm has a post for engaging the arcuate slot to limit pivotal movement of the second support with respect to the arm, such that the pivotal connections are a means for restricting the degree of angular rotation of the supports and the radial walls limit the degree of angular rotation.